

REGULATIONS COVERING RECORDS FOR GLIDERS AND POWERED GLIDERS

The international records of gliders are the best national registered performance, without taking account of the local terrain on which they have been made. They are classified in two categories, as follows:

1st Category: Single-place gliders.

2nd Category: Multi-place gliders.

The following records may be established in each of the above categories:

(a) Distance in a straight line—Record Diploma.

(b) Distance with return to point of departure—Record Diploma.

(c) Duration with return to point of departure—Record Diploma.

(d) Altitude above the starting point—Record Diploma.

(e) Duration to a fixed destination—Record Diploma.

All the records may be established by gliders launched by a motor driven apparatus or by other methods.

Special Provisions Concerning the Records of Gliders

For records b and c, by return to the starting point is meant return within a circle of 3,280 feet radius having for its center the starting point.

The records for distance with return to the starting point of gliders must comprise only one passage going and return between the starting point and the turning point which must be determined in advance.

The new record must be greater than the preceding by 5%.

These performances must be made without intermediate landing.

The minimum between altitude records is 328 feet.

The minimum between duration records is 15 minutes.

For the records for distance to a fixed destination, the landing point must be indicated by the contestant before departure to the official in charge of the record attempt. This landing point preferably should be an airport which can easily be recognized during flight. If the predetermined landing point is not an airport, the contestant must make arrangements to have an official on hand in order to certify the landing, which in this case, must be made within a circle having a radius of 3,280 feet, whose center shall be considered as the landing point.

For two-place gliders, the weight of the crew must be at least 330 lbs. If they do not weigh this amount, non-utilizable sealed ballast must be carried to make up the difference.

For all glider records of the 2nd Category, dual controls may be used and all seats must be occupied.

For duration records of gliders, times may be taken by official timers, provided they use an accurate stop watch.

In gliders, calibration of barographs

before the record attempt is not necessary, when the instrument serves only to attest the proper execution of the performance (endurance, distance, etc.).

When a barograph serves to record an altitude record attempt, the instrument must be calibrated by the record committee. The barograph must be forwarded within 8 days following the record attempt to the record committee. (Please include a fee of one dollar to help handle the expense of packing, postage, etc.)

Control of Records Established by Tow-Launched Gliders

For gliders towed by a powered aircraft or launched by any other apparatus, the starting point shall be considered the point at which the glider shall be separated from the towing aircraft or when the effect of the launching apparatus shall cease.

The point and time of starting shall be determined with the aid of the usual measuring and sighting processes, by accepted glider observers.

For the duration record, the time which shall be accepted shall be that recorded on the barograph.

The separation must be made at a maximum of 4,921 feet above the point at which the glider shall have left the ground, and in the sight of officials in such a way that they can determine unquestionably the point and time of starting.

The glider must be provided with a barograph on which the exact time shall be noted, before the start, by an official. The same shall apply for the towing aircraft. The aircraft must make, at the time of the separation between it and the glider, a steep glide which will permit reading unquestionably on the barograph trace the altitude of the points of separation from the glider.

The altitude attained by the glider in the course of its performance will be counted only beginning from the altitude of the point of separation from the towing aircraft.

The distance covered by the glider shall be measured in a straight line from the vertical projection (point of separation to ground) to the landing point or to the turning point, according to whether it is a question of a record for distance in a straight line or a record with return to starting point.

The difference in altitude between the point of separation and the landing point must not exceed 1% of the total distance.

For duration records with return to the starting point, the duration shall be counted from the time of separation of the glider from the towing aircraft until the landing.

For records with return to the starting point, the landing must be made within a circle of 3,280 feet radius, of which the center shall be the vertical projection of the point of separation on the ground.

Seaplane Category

The aforementioned records may like-

wise be established by seaplane gliders, i.e., gliders which take off and land on water.

Powered Gliders

Regulations for Powered Glider Records

First Category

Single-Place Powered Gliders

There shall be admitted to this category all single place powered gliders which meet the following technical conditions:

Maximum total weight ready for flight—771.6 lbs.

Maximum engine cylinder displacement—61 cubic inches.

Coefficient of flight P or P must
 b^2 S^t

not exceed 5.5 lbs per 10.76 square feet.
 P equals total weight in lbs.

S equals area in square feet.

t equals aspect ratio

b equals wing span in meters

Second Category

Bi-Place Powered Gliders

There shall be admitted to this category all bi-place powered gliders which meet the following technical conditions:

Maximum total weight ready for flight—992.06 pounds.

Maximum engine cylinder displacement:

(a) Single engine—79.3 cubic inches.

(b) Bi-engine—97.6 cubic inches.

Maximum coefficient of flight P or P
 b^2 S^t

must not exceed 5.5 lbs. per 10.76 square feet.

Single-place, as well as bi-place powered gliders must conform to the conditions of takeoff and landing specified below:

1. Takeoff: From a standing start, the powered glider must clear an obstacle 26.25 feet high, placed at a maximum distance of 820.2 feet from the starting point.

2. Landing: The powered glider must clear an obstacle 26.25 feet high and must stop within 820.2 feet, the distance being measured from the obstacle.

Measurement of Distance from the Powered Glider to the Obstacle

The part of the powered glider from which the measurement is to be taken is that nearest to the obstacle.

Takeoff or landing trials may be conducted only in a wind of less than 9.83 feet per second, measured at 6.56 feet from the ground.

International Records for Powered Glider of the 1st and 2nd Categories

1. Duration with return to point of departure.

2. Distance in a straight line.

3. Altitude above the take-off point.

For all powered glider records, the amount of fuel is limited to:

5.2 gallons for single-place craft;

7.925 gallons for bi-place, single engine craft;

9.125 gallons for bi-engine craft.